City of Marysville Stormwater Management Program Plan 2023

EST. 1891
MARYSVILLE
WASHINGTON

PERMIT TERM: August 1, 2019 to July 31, 2024

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PURPOSE

The National Pollutant Discharge Elimination System (NPDES) Permit (Permit) is a federal permit that regulates stormwater and wastewater discharges to waters of the State. While it is a federal permit, the regulatory authority has been passed to the Washington State Department of Ecology (Ecology) for program implementation. The first term of the modern Western Washington Phase II Municipal Stormwater Permit began in January of 2007. The current permit term is five years, beginning on August 1, 2019 and ending on July 31, 2024.

The current Permit requires that all regulated municipalities create and implement a Stormwater Management Program (SWMP), which addresses eight required program elements:

1) Stormwater Planning
2) Public Education and Outreach,
3) Public Involvement and Participation,
4) MS4 Mapping and Documentation,
5) Illicit Discharge Detection and Elimination,
6) Controlling Runoff from New Development, Redevelopment and Construction Sites,
7) Municipal Operations and Maintenance, and
8) Source Control Program for Existing Development

This SWMP must also describe the planed actions to meet Total Maximum Daily Load (TMDL) and Monitoring and Assessment requirements, if applicable to the City. Marysville is subject to both of these requirements, so they are also described for the upcoming calendar year.

This SWMP Plan will document what actions the City will take in 2023 to meet the Permit requirements. The SWMP Plan is designed to reduce the discharge of pollutants from the regulated small municipal separate storm sewer system (MS4) to the maximum extent practicable (MEP) and meet state AKART (all known and reasonable technologies) requirements and protect water quality.

INTRODUCTION

The City of Marysville is located in Snohomish County approximately five miles north of Everett, and adjacent to the southern border of the City of Arlington. Major highways within the City include Interstate 5, State Route 531, State Route 528 and State Route 529. The Burlington Northern Santa Fe Railroad also runs north to south through the City.

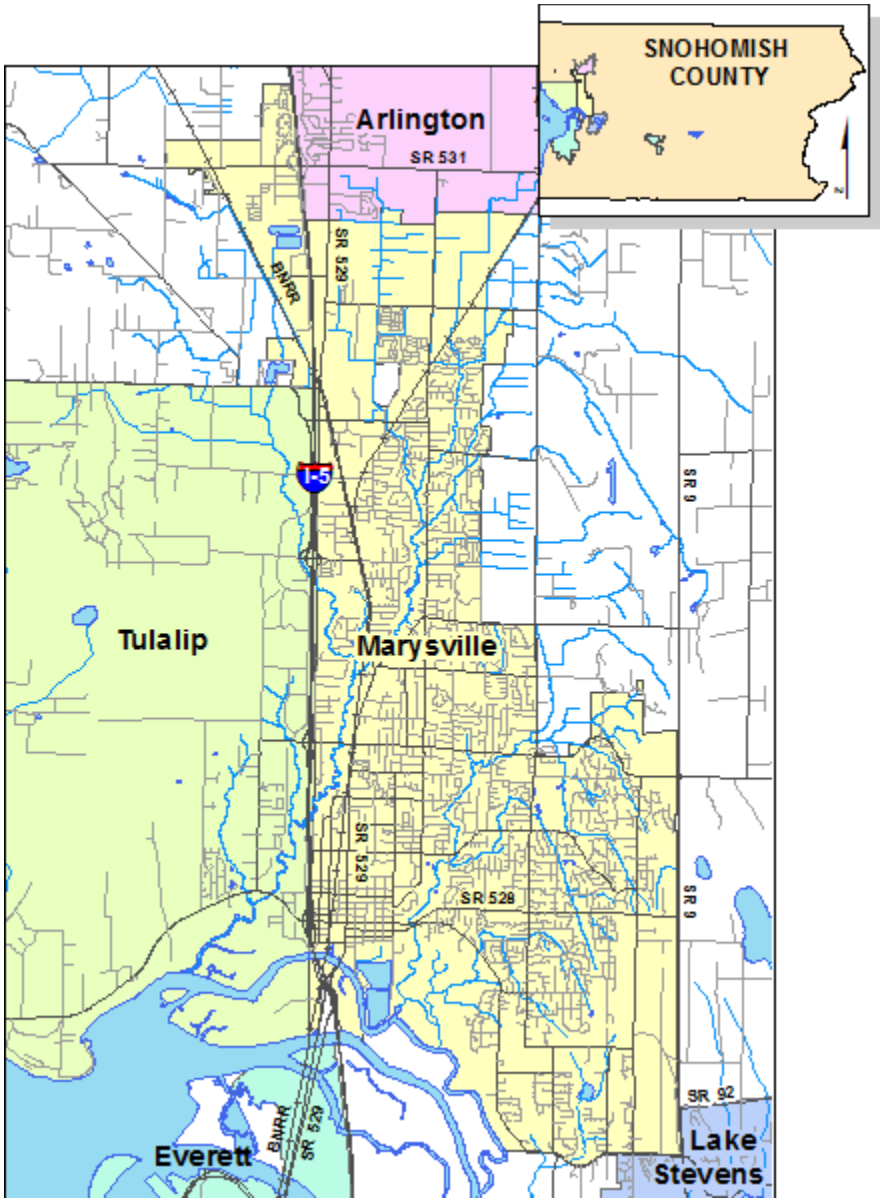


Figure 1: Regional Map of Marysville

Population and Growth

The City of Marysville was incorporated in 1891 with 350 inhabitants. Timber related industries increased the population to 1250 residents by 1905. As new buildings, schools, streets, bridges and highways were built the town's population continued to grow. It took approximately 50 years for the City to double in size and in 1954 it had grown to 2,500 people. By 1980, the population had again doubled, but in half the time it had previously taken. Since 1980, the population has almost doubled with each decade through 2000. Marysville's location with proximity to major employment centers and transportation corridors, the beauty of the natural setting, the moderate size of the community, and the relatively reasonable housing costs make it an attractive City. Upon annexing the majority of its Urban Growth Area (UGA) in December 2009, the City grew to approximately 58,040 residents. Currently the population is roughly 67,000 people.

Land Use Distribution

Marysville is largely comprised of residential neighborhoods. A large majority of the commercial and industrial property is located on the east and west sides of State Avenue, which is the main north-south thoroughfare through the City. New commercial and industrial development is occurring in the Downtown, Lakewood and Smokey Point areas of Marysville.

Hydrologic Conditions

The City is part of the lower Snohomish River Basin, in Water Resource Inventory Area (WRIA) 7. Quilceda and Allen watershed are the two sub basins draining a majority of the City. The Quilceda/Allen watershed contains approximately 70 minor streams and tributaries and encompasses an area of approximately 49 square miles. Approximately 11 square miles drains to Allen Creek and the other 38 square miles drains to Quilceda Creek. Both of these creeks empty into Ebey Slough near the mouth of the Snohomish River.

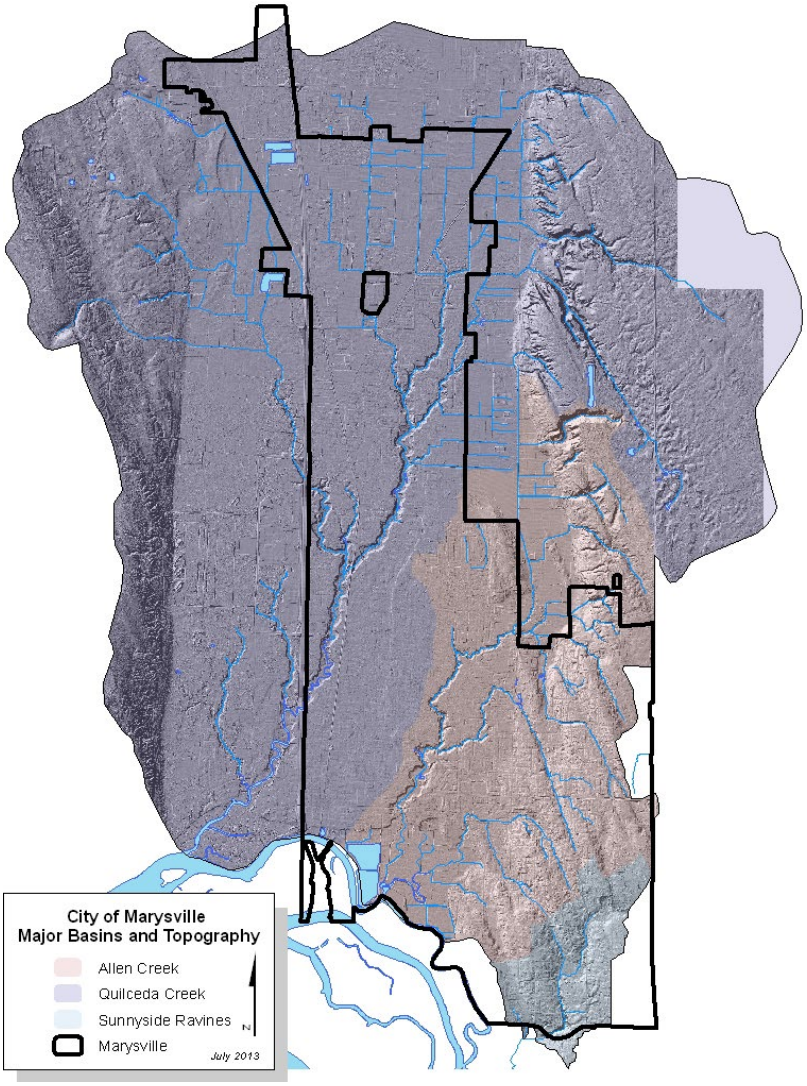


Figure 2: Marysville Topographic/Watershed Map

The Quilceda Basin consists of till, outwash, Custer Norma and saturated soils with the central plain of the basin being comprised primarily of a combination of Custer Norma and outwash soils. The eastern and western hillsides primarily consist of till soils. Till soils are dense and have limited infiltration capabilities, whereas Custer Norma and outwash soils drain well. However, due to high winter groundwater tables in the basin, surface water runoff is common. The Allen basin consists of till, outwash, Custer Norma and saturated soils. Again, due to high groundwater tables in the winter, surface water runoff is common in the Allen Basin. Marysville receives approximately 37.5 inches of precipitation annually with the majority of it falling in the winter and spring months.

Topography

The Marysville Trough is the most prominent topographic feature characterizing the City. The Marysville Trough is an expansive, nearly flat, alluvial plain and runs north south through much of the City. Elevations along the trough range from approximately 130 ft. in the north to sea level in the south along Ebey Slough. The Trough is bordered to the west by the Tulalip Plateau and to the east by the Getchel Hill Plateau.

The headwaters to Quilceda and Allen Creeks are located in the northeast, on the Getchel Hill Plateau. The maximum elevation is 430 feet located at the intersection of 74th place and 83rd avenue and slopes in this area are generally northwesterly. The headwaters of Jones, Munson and King Creeks are located

in the southeast on the top of the Getchel Hill Plateau. The maximum elevation in this area is 465 feet, between 60th and 64th streets on Highway 9 at the eastern edge of the City limits.

Receiving Water Quality and Pollutants of Concern

Both Allen and Quilceda creeks have been placed on Washington State's 303(d) list for fecal coliform, requiring Total Maximum Daily Load (TMDL) cleanup plans. Other pollutants of concern within the Allen/Quilceda Watersheds include total suspended solids (TSS), fertilizers, petroleum, detergents, heavy metals and organic wastes. In the summer months, low dissolved oxygen levels are also a concern. Primary sources of pollution in the watershed may include high sediment loads, runoff from agricultural and pasture lands, failing septic systems in older neighborhoods and increased impervious runoff causing high pollutant loading from urbanization. All these activities have potentially detrimental effects on water quality within the watershed.

Stormwater Drainage System

Within Marysville, stormwater runoff from buildings, driveways, parking lots and other impervious surfaces is collected, then conveyed through public and private drainage systems to local waterways. Most of the public drainage lines are within existing road rights-of-way. Much of the run-off is conveyed to public detention/water quality facilities prior to release, or detained and treated on-site in a private facility then released into the public system. The storm drainage system ultimately discharges stormwater to one of the local tributaries or directly to Ebey Slough.

COORDINATION

The Surface Water Division works both internally and externally to coordinate permit activities. General coordination activities that don't fall under a specific permit section are described below. The groups responsible for specific items required in the Permit are called out in the applicable section of this SWMP Plan.

S5.A.5.a: The City of Marysville borders the Cities of Arlington and Lake Stevens, Unincorporated Snohomish County and the Tulalip Tribes Reservation. The Cities of Arlington and Lake Stevens are Phase II Permittees and Snohomish County is a Phase I Permittee, while Tulalip Tribal Land is federally regulated and not covered by the Washington State NPDES Permit program. The primary mechanism for external coordination is the North Sound Permit Coordinators meetings. These quarterly meetings create a forum to coordinate stormwater management activities for shared water bodies among Permittees, and avoid conflicting plans, policies and regulations. External coordination is also accomplished through the Status and Trends Monitoring Option #1 of section S8 in the Phase II Municipal Permit.

The City coordinates with Fire District 12 for Illicit Discharge spill response. The Fire District has a Hazardous Materials Team and works as a part of the countywide response team.

The City hosts the Allen Quilceda Watershed Action (AQWA) Team. This group includes Adopt-A-Stream, City of Arlington, Department of Ecology, Marysville School District, Snohomish Conservation District, Snohomish County, Sound Salmon Solutions, and Tulalip Tribes. The meetings provide a forum to discuss activities happening throughout the watershed, coordinating efforts when possible.

The City also coordinates with Snohomish County, Department of Ecology and STORM (a regional educational outreach group) to provide education and outreach programs. See a full description of those programs in the Education and Outreach section of this SWMP Plan.

S5.A.5.b: Within the City, the Surface Water division is the main work group responsible for Permit implementation. The primary mechanism for internal coordination is engagement with other City working groups through meetings and involvement in activities, thereby providing direct support or clarification when needed and reducing barriers to Permit compliance. Table 1 is a general overview of the Permit requirements and the City departments, or partners, which are responsible for each requirement. See Appendix 1 for City organizational charts.

Table 1: Overview of Responsibilities

Permit Section	Title	Division(s) Responsible
S5.C.1	Stormwater Planning	Surface Water Division Community Development Department
S5.C.2	Public Education and Outreach	Surface Water Division Parks Department Marysville School District AQWA Team Organizations STORM
S5.C.3	Public Involvement and Participation	Surface Water Division
S5.C.4	MS4 Mapping and Documentation	Surface Water Division GIS (Information Services group)
S5.C.5	Illicit Discharge Detection and Elimination	Public Works All City Staff (reporting incidents) Fire District 12
S5.C.6	Controlling Runoff from New Development, Redevelopment and Construction Sites	Surface Water Division, Community Development Department, Engineering
S5.C.7	Municipal Operations and Maintenance	Public Works, all groups
S5.C.8	Source Control Program for Existing Development	Surface Water Division

Public Works (PW)

The Surface Water Division is part of the Public Works Department, and the primary work group responsible for Permit implementation. This group creates permit related submittals, plans, reports and records. There are six staff members within the division, the Storm/Sewer Supervisor, a Permit Coordinator, two Surface Water Specialists, two Surface Water Inspectors. Two of these positions are new in 2023. The Sewer/Storm Maintenance Division is managed by the same supervisor as the Surface Water Division. The Sewer/Storm Maintenance Division fulfill many of the Operation and Maintenance activities required by the Permit.

The Surface Water Division has prepared Standard Operating Procedures (SOPs) describing how procedural and tracking of permit activities is conducted within several City departments.

The Surface Water Division implements in house training efforts and assists other departments to receive external training when needed/appropriate. In house training for all PW Crews on Best Management Practices (BMP) and Illicit Discharge Detection and Elimination (IDDE) are typically held annually. While these trainings are utilized to convey the primary subject matter, they are also used to relay overall Permit concepts, changes in requirements and supporting documents like the Stormwater Pollution Prevention Plan (SWPPP) or BMP Documents. Multiple work groups within the PW department work to update and comply with the citywide SWPPP.

The surface water utility funds are used to support a variety of positions throughout the City because the staff members perform permit related job duties. These positions include Public Works and Community Development Department staff.

Engineering

Development Services, reviews development plans for technical requirements, specified in Appendix 1 and the Stormwater Manual. A weekly meeting with Development Services is attended by the Surface Water Inspector. This meeting creates an open dialogue regarding current issues throughout the development process and provides a forum for coordination.

Parks Department

The Surface Water Division regularly orders refill bags for mutt mitt stations located throughout City parks. The Parks department notifies a Surface Water staff member when bags are close to running out and need to be reordered. The Parks department is involved with many citywide events and coordinates facility reservations for meetings/events. The Parks department also works to update and comply with the citywide SWPPP.

Other Departments

All staff members are responsible for reporting illicit discharges to the City's Spill Hotline.

The City maintains an internal web site, which opens as the home page. On the internal web site, there is a link to a Surface Water Division departmental page. This page has information and training videos posted. The City also has an internal newsletter that is distributed citywide. This newsletter can be used to post surface water related reminders.

STORMWATER MANAGEMENT PROGRAM COMPONENTS

1) Stormwater Planning

Summary Permit Requirements

- Coordinate with long range plan updates. Investigate how the Comprehensive Plan has addressed stormwater issues in the past, and how they will be addressed for the future.
- Continuation and annual review of the Low impact development programs established in 2016.
- Stormwater Management Acton Planning process including a receiving water assessment, receiving water prioritization, and an action plan developed for at least one priority catchment area. The action plan will identify short and long term actions, including retrofits that can improve water quality.

Planned Activities

S5.C.1.a: The City has convened an inter-disciplinary team to inform and assist in the development, progress, and influence of the Stormwater Planning program. The team includes the Community Development Department staff and Engineering. Other internal and external partners may be identified for specific tasks.

S5.C.1.b: The City's inter-disciplinary team has assessed and described how stormwater management needs and protection/improvement of receiving water health have or have not informed the planning processes or influenced policies and implementation strategies. The report described the water quality and watershed protection policies, strategies, codes, and other measures intended to protect and improve local receiving water health. The report was submitted by the January 1, 2023 deadline.

S5.C.1.c: The City will continue to implement the low impact development code related requirements adopted in 2016. Annually the City will assess and document any newly identified administrative or regulatory barriers to implementation of LID Principles or LID Best Management Practices (BMPs). The City will develop measures to address any barriers identified. If applicable, the report will describe mechanisms adopted to encourage or require implementation of LID principles or LID BMPs.

S5.C.1.d: The City began Stormwater Management Action Planning (SMAP) in 2020. The City applied for, and received a Water Quality Financial Assistance grant for this activity. The planning process was similar to and considered the range of issues outlined in the *Stormwater Management Action Planning Guidance* (Ecology, 2019; Publication 19-10-010). The Receiving Water Assessment and Receiving Water Prioritization have been completed. The full report can be viewed on the City's surface water web page (www.marysvillewa.gov/179/Surface-Water).

S5.C.1.d.iii: The Stormwater Management Action Plan (SMAP) will be completed by March 31, 2023. The SMAP will describe the stormwater facility retrofits, tailored implementation of SWMP actions, and other land/development management actions for the basins selected. The SMAP will also identify if there are any changes needed to long range plans, a proposed short and long term budget sources and schedule for future assessment of the plan.

2) Public Education and Outreach

Summary Permit Requirements

- Implement an education and outreach program designed to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities.
- The program should build general awareness about methods to address and reduce impacts from stormwater runoff.
- Effect behavior change to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. The program should measure the understanding and adoption of the targeted behaviors for at least one target audience in at least one subject area and use the resulting measurements to direct education and outreach resources most effectively.
- Evaluate past education and outreach efforts then use the results to tailor future education and outreach efforts. Future programs must use community-based social marketing strategies.

Planned Activities

S5.C.2.a: City staff have developed an education and outreach program that will be implemented throughout the entire City. The program was designed to educate target audiences about stormwater problems and provide specific actions they can follow to minimize these problems.

S5.C.2.a.i: Due to the COVID pandemic the education and outreach events were modified. Events are starting to resume and are planned to occur in 2023.

Adopt-A-Street: The City of Marysville Adopt-A-Street Litter Control Program is a stewardship program designed to clean up litter along the right of way, preventing it from being washed into the MS4. This program is organized within the Streets Division. Participating groups volunteer to remove litter from an assigned section of street at least four times a year over a two-year period. Groups are usually asked to remove litter from at least six street blocks. In return the Public Works Department posts permanent signs identifying the adopting group, provides safety vests, hard hats and trash bags. When the bags are filled, groups leave them at the clean-up site, and City of Marysville solid waste collectors pick them up.

AQWA Team: The City participates in the Allen Quilceda Watershed Action (AQWA) Team. This group serves as a coordination forum for local nonprofit groups, Cities, the Snohomish Conservation District and the Tulalip Tribes. The City plans to continue facilitating the meetings virtually to coordinate grant opportunities. The group usually coordinates the annual Earth Day Event. This event is expected to resume in 2023.

Catch Basin Markers: The City has a catch basin marker program and uses adhesive storm drain markers. Citizens can request their storm drain to be marked and City staff generally complete the storm drain marking. The drain marker includes the report a spill phone number. In 2023, new neighborhoods will be selected to install markers.

City Code: The Marysville Municipal Code (MMC) contains standards relating to Stormwater treatment and flow control BMPs/facilities, technical standards for stormwater, site and erosion control plans, and low impact development (LID) principals and LID BMPs. City adopted the *2019 Stormwater Management Manual for Western Washington* (Stormwater Manual) with Ordinance 3218, effective July 1, 2022. All review staff and planners have this manual available to them. A link to the Manual is provided on the City website. During the plan review process, Development Services staff members check for adherence to Stormwater Manual standards, ensuring that engineers, contractors and developers are aware of the standards.

EDDS: The Development Services Division develops the Engineering Design and Development Standards (EDDS). The Surface Water Division, and Engineering completed a review and updated the EDDS in 2022. These standards must be used by engineers, developers and contractors submitting building plans to the City. The EDDS are publicized on the City website.

Events: General information about stormwater topics is distributed during events. The information distributed is tailored to the event. However information about proper dog waste disposal is the most common topic presented. The City plans to continue purchasing and distributing dog waste bag dispensers at events.

City events usually include:

- Clean Sweep - April
- Earth Day - April
- Healthy Communities Day - June
- Poochella- June
- Marysville Street Festival
- Touch a Truck

Handbooks: The "Rain Garden Handbook for Western Washington" was created by Washington State University Extension, Department of Ecology and other project partners and serves as a guide for design, installation and maintenance of rain gardens. The Handbook is routinely distributed to residents and private property owners. Additional Handbooks are ordered as needed.

Facility Inspections: The Surface Water Inspector contacts the owners of private commercial and residential stormwater systems. In most residential situations, everyone in the neighborhood is contacted after an inspection has occurred. This program informs owners about the stormwater system and how illicit discharges may affect the system they are responsible for maintaining. The educational inspections occur at facilities that are older and are not required to be inspected by the Permit. These inspections will be completed as time allows. All private facilities permitted by the City after February 16, 2010 will be inspected per section S5.C.7.b.b.

In past years, the City has offered a grant called the "Community Beautification Program." Several neighborhoods have been awarded the grant and completed stormwater facility maintenance with the funds. It is unclear if the beatification grant or a similar program will be available in 2023.

The City has approved bioretention facilities that are in right of way, or in open space areas, at some new residential developments. The City is taking a private/public approach to the maintenance of these facilities. The City will conduct annual inspections and maintain the hard infrastructure pieces of the system. The homeowners are responsible for the landscaping. This policy is consistent with the

approach taken for other landscaping strips and street trees planted within a typical sidewalk. To implement this approach the City is conducting outreach to the Homeowners Associations (HOA) of these developments.

Mutt Mitt Stations: Numerous Pet Waste Stations have been installed in City Parks. The Stations and the information associated with them educate the general public on the health and environmental risks associated with pet waste. The Parks Department will continue to maintain the existing pet waste stations.

Regional Campaigns: The City participates in the regional Stormwater Outreach for Regional Municipalities (STORM) group. The STORM group includes 57 cities and counties in conjunction with the Washington State Puget Sound Partnership and Washington State Department of Ecology. The City plans to continue attending the regional STORM meetings and the local Snohomish County STORM subgroup.

School District Education: The City gives the Marysville School District a reduction in their surface water fees based on the development and implementation of an environmental education program. Programs are being taught in the 5th, 7th and High School grade levels. Due to COVID-19 and associated restrictions, the Marysville School District and Sound Salmon Solutions have collaborated to provide a virtual program for students. The City will coordinate with the School District to determine if the curriculum will be changing in 2023.

Source Control: The Source Control inspection program will begin site visits in 2023. This inspection program will offer both general and site specific information about stormwater to business. More details are included in Section 8 Source Control Program for Existing Development.

Web Site/ Social Media: The City maintains a web site with a surface water page. Topic specific general information is posted on this page. The home page and social media are also used for event notifications and seasonally specific information.

Table 2: S5.C.2.a.i Build General Awareness

	Audience					
Subject Area	General Public	Businesses	Engineers	Contractors	Developers	Land Use Planners
General impacts of stormwater on surface waters	CB Markers, Facility insp.	Source Control				
Impacts from impervious surfaces	Web Site		EDDS, Code			
Low impact development (LID) principals and LID BMPs	Handbooks		EDDS, Code			
Technical standards for stormwater and site and erosion control plans			EDDS, Code			
Stormwater treatment and flow control BMPs/facilities	Facility Inspections	Facility Inspections	EDDS, Code			

Opportunities to become involved in stewardship activities	AQWA Team, Adopt-A-Street Web site					
Impacts of illicit discharges and how to report them	Drain markers, Web site	Source Control				
TMDL: bacterial pollution problems and promote proper pet waste management behavior	Events Mutt Mitt Stations					

S5.C.2.a.ii: The City participates in a regional effort through the STORM subgroup called "DOG" or Dumpster Outreach Group. The group focuses on dumpster enclosure maintenance and education. The goal of DOG was to evaluate BMPs associated with garbage enclosures and develop a behavior change program. In 2020, twenty-five jurisdictions collaborated in a four-part Dumpster Summit. The purpose of the Summit was to use social marketing techniques to create a regional social marketing plan that all jurisdictions could implement independently to meet permit requirements. The Summit was facilitated by Nancy Lee and guided jurisdictions through a 10-step process that included identifying and evaluating a target audience, isolating an effective BMP, and developing an implementation plan. By the conclusion of the Summit, the group had developed four different social marketing plans, each with a unique approach to an audience and behavior. The majority selected one social marketing plan to implement on a regional scale. The chosen plan targeted a commercial audience with the desired behavior of closing dumpster lids. A consultant then developed outreach material, signs, and dumpster stickers to effect behavior change for this audience.

The City implemented this program in 2021. In addition to the benefits of regional collaboration, Marysville specifically selected the dumpster maintenance BMP based on local need and anticipated benefits. As a city with its own Solid Waste division within Public Works, such a program will directly benefit employees that interact with dumpster enclosures on a daily basis. The City Solid Waste crew is also the leading internal reporter of illicit discharges and spills, a majority of which relate to improper garbage storage and enclosure maintenance. Prior to the dumpster summit, the City Surface Water Inspector performed windshield surveys of several dumpster enclosures and found a majority were unsatisfactory and posed a potential risk to water quality. The City anticipates that implementing a behavior change program surrounding dumpster enclosure BMPs will help reduce illicit discharges, reduce water pollution, improve cleanliness, reduce pests, improve safety for business owners and staff, reduce illegal dumping, and streamline the workflow for Solid Waste employees.

When implementing the pilot program locally, the City further narrowed the target audience to commercial businesses in the downtown area that are not closing dumpster lids. The City inspected all businesses in this area to compile an inventory of baseline data. From this inventory, the City selected a small group of businesses to participate in the 2021 pilot program. Priority was given to businesses which repeatedly exhibit open lids, are located near storm drains, are within close proximity to downtown/Public Works building, have previous IDDE records, and/or are on similar garbage routes.

The behavior change products (educational materials, signs, stickers) were purchased based on the number of participating businesses. The pilot program included an initial inspection in which the signage and stickers were installed, followed by an in-person or phone meeting with the business owner or staff to provide educational materials. Once initial contact was made, follow-up inspections and outreach was

conducted at each site. Additional materials will be given to businesses that continue to have open lids. The program concluded with a final round of inspections.

In 2023 the Dumpster Outreach program will continue. The program will be adapted to be conducted with the Source Control business inspections.

Table 3: S5.C.2.a.ii Behavior Change- 2023 Dumpster Outreach Schedule

Pre-Implementation Tasks and Schedule	
Evaluate data from 2021 pilot program	January
Purchase communication elements (stickers, signs) if needed	January- February
Perform new dumpster audit within Downtown	February- March
Finalize business list of repeat offenders, prioritizing small businesses (<20 employees) and those near storm drains or waterways	March
Implementation Tasks and Schedule	
Schedule and perform initial business outreach, provide businesses with toolkit information/handouts	April - May
Install communication elements in dumpster enclosure	April - May
Perform follow-up inspections and reinstall communication elements as needed	July
Provide incentive/follow up to successful businesses	August
Perform additional outreach at unsuccessful businesses	August
Conduct final inspections and reinstall communication elements as needed	October
Compile data and evaluate	November
Write report that evaluates the changes in understanding and adoption of behaviors	December (Due March 31, 2024)

S5.C.2.a.iii: The City is expecting stewardship programs to begin returning to their pre-COVID form in 2023. Larger stewardship events such as Earth Day and restoration plantings will be planned with the Allen Quilceda Watershed Action (AQWA) Team. The AQWA Team is comprised of representatives from local city, county and state agencies, the Tulalip Tribe, Marysville School District, non-profit organizations, local businesses and residents. The meetings allow each group to share what they are doing in the watershed and coordinate efforts when possible.

3) Public Involvement and Participation

Summary Permit Requirements

Provide ongoing opportunities for public involvement and participation through advisory councils, public hearings, watershed committees, participation in developing rate-structures or other similar activities. Post the SWMP Plan and the annual report on the City web site no later than May 31 each year, and make other submittals available to the public upon request.

Planned Activities

S5.C.3.a: To create opportunities for the public to participate in decision-making processes involving the development, implementation and update of the SWMP Plan Surface Water staff will post requests for public comments annually. A request for comments will be added onto the City utility bills, posted on the front page of the City web site, added to the surface water web page, and posted to the City's social media sites. The SWMP will be available for review and comment in January and February of 2023.

S5.C.3.b: The SWMP Plan and the annual report required under S9.A are posted on the Surface Water web page titled "NPDES Phase II Permit" no later than May 31 each year (http://marysvillewa.gov/index.aspx?NID=294). All other submittals are available to the public upon request.

4) MS4 Mapping and Documentation

Summary Permit Requirements

- Ongoing mapping the Municipal Separate Storm Sewer System (MS4), receiving waters, land use, and connections between systems owned and operated by other parties.
- Collect size and material information for infrastructure, if not already known.
- Maintain a digital format for mapping with fully described mapping standards.
- Provide mapping information to Ecology and the public as appropriate.

Planned Activities

S5.C.4.a: The City employs three full time GIS staff members, within the Information & Geographic Services Department, to handle the mapping requirements for all City utilities. Mapping information is updated on an ongoing basis. They digitize the MS4 system into ArcGIS utilizing paper and digital record drawings. A Global Positioning System (GPS) is also used in the field to verify the accuracy of the digitization and to map areas that do not have a record drawing. In 2007 GIS staff began mapping all public and private systems that are authorized and/or connected to the MS4.

The City's GIS system includes but is not limited to the following information:

- Known MS4 outfalls and known discharge points, including the size and material
- Receiving waters, other than ground water
- Stormwater treatment and flow control BMPs/facilities owned or operated by the City
- Areas served by the MS4 that do not discharge stormwater to surface waters
- Stormwater pipe (type, material, and size where known)
- Associated drainage areas
- Land use
- Connections between the MS4 owned or operated by the City and other municipalities or public entities
- All connections to the MS4 authorized or allowed by the City after February 16, 2007

S5.C.4.b.i: The City has been collecting the size and material information for all known MS4 outfalls since GIS mapping began. When routine inspection, maintenance, or field screening activities find new outfall information it will be updated in the GIS database.

S5.C.4.b.ii: No later than August 1, 2023 the City will map all known connections from the MS4 to a privately owned stormwater system. The GIS database already contains this information. Staff will complete an assessment of the methodology selected for mapping and ensure consistency with this requirement.

S5.C.4.c: Mapping of the MS4 is done using Geographic Information System (GIS) software called ArcGIS. All mapping data is kept digitally. The City has created a mapping standard operating procedure to describe the process used to record data.

S5.C.4.d & e: The City's GIS information is available online at http://www.marysvillewa.gov/295/GISMaps. This website has links to data, pdf maps, and interactive online maps. The information is available to the public and Ecology at all times.

5) Illicit Discharge Detection and Elimination (IDDE)

Summary Permit Requirements

- Implement an ongoing program designed to prevent, detect, characterize, trace, and eliminate illicit connections and illicit discharges into the MS4.
- Provide outreach to the public about the hazards of illicit discharges
- Implement an ordinance or other regulatory mechanism to prohibit non-stormwater, illicit discharges into the MS4 to the maximum extent allowable under state and federal law.
- Implement an ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the MS4.
- Implement an ongoing program to address any illicit discharges, including spills and illicit connections, into the MS4.
- Train staff members that are responsible for identification, investigation, termination, cleanup, and reporting of illicit discharges to conduct these activities.
- Keep records of all activities related to Illicit Discharge Detection and Elimination, then report them using the Ecology web portal.

Planned Activities

S5.C.5.a. The City Illicit Discharge Detection and Elimination (IDDE) program includes procedures for reporting and removing illicit connections, spills and other illicit discharges when they are suspected or identified. The program includes procedures for addressing pollutants entering or leaving the MS4 from an interconnected, adjoining MS4. Illicit connections and illicit discharges are identified through:

- field screening,
- construction inspections,
- maintenance inspections, and/or
- monitoring information

These program elements are described in more detail below.

S5.C.5.b: The City uses internal meetings, newsletters and trainings to inform employees about the Illicit Discharge Detection and Elimination (IDDE) program. General outreach programs have been developed to inform businesses and the general public of the hazards associated illicit discharges and improper disposal of waste. These programs were described in the Public Education and Outreach section.

S5.C.5.c: Marysville Municipal Code (MMC) Chapter 14.21- Illicit Discharge Detection and Elimination (IDDE) and other related sections in MMC are used to prohibit non-stormwater illicit discharges into the MS4. This Chapter is enforced by the Surface Water Division and the Code Enforcement Officers. The IDDE chapter includes a list of acceptable discharges, conditionally acceptable discharges and prohibited discharges.

S5.C.5.d: The City will continue to implement and ongoing program designed to detect and identify non-stormwater discharges and illicit connections into the City's MS4 using the methods described below:

S5.C.5.d.i To detect and identify non-stormwater discharges and illicit connections to the MS4, the City has been using the methods described in the *Illicit Connection and Illicit Discharge Filed Screening and Source Tracing Guidance Manual,* 2020.

The primary IDDE screening method include investigation during regularly scheduled inspections, and daily work activities. The City must conduct field screening of at least 12% of the system annually. In order to meet this requirement Surface Water staff had to determine a reasonable method for quantifying the percentage of MS4 screened. After reviewing the definition of a MS4 in the Permit, public street miles were chosen as a proxy measure to represent the MS4.

The City catch basin inspections serve as the primary IDDE screening method. Catch basins are inspected on a grid basis and the entire City is completed every four years. The Sewer/Storm Maintenance Division conduct catch basin inspections and cleaning. Each year the lane miles with catch basins that were inspected is divided by the total lane miles in the City. This yields a percentage of MS4 field screened.

Stormwater treatment and flow control BMPs/facilities are also screened during the normally scheduled annual inspections. However, including the lane miles of road draining to facilities would introduce areas being counted twice. Once for the catch basin screening and again for the facility inspection. Therefore the screening conducted at facilities is not accounted for in the percentage of MS4 screened. Ultimately this means the percentage screened is underestimated.

Using this method to quantify the percent of MS4 screened, it is not possible to inspect 100% of the City, because not all streets in the City have catch basins. In order to ensure all areas of the City are screened for illicit discharges, Surface Water staff members emphasize awareness of IDDE during daily activities as part of IDDE training so that the remaining areas of the City are informally screened. Staff members continually find more incidents of illicit discharges during their daily work activities than any other method of detecting discharges.

Starting August 1, 2019 the City was required to track the annual percentage screened and the total cumulative percentage of the MS4 screened during the permit cycle. This requires an extra calculation step to ensure that areas are not counted multiple times during the permit cycle because catch basins on high traffic corridors are inspected annually.

Table 4: S5.C.5.d.i Percent MS4 Screening Quantification

Year	Lineal Ft of St inspected	% Screened for Year (Lineal Ft of St w/cb's inspected / Total Lineal Ft in City)	Total % MS4 Screened for Permit Term
2019	225,074	23%	7%
2020		26%	33%
2021	254,249	23%	56%
2022		At least 20%	

S5.C.5.d.ii: The City will maintain the spill reporting hotline in 2023. The hotline number connects to the City reception voice mail. If the caller dials 0 they are transferred to the receptionist. Illicit discharge calls can then be directed to Surface Water staff member available at the time of the call. After hours, the on-call Public Works staff responds. The hotline is listed in the blue pages under "spill reporting". The number has also been advertised on brochures, coloring books, and drain markers. The City keeps records of all calls received and follow-up actions taken.

The City also maintains a "Report a Spill or Water Pollution" web page. From the City home Page, a resident can click the main "I WANT TO…" drop down menu. Under the reporting section, they click "Spill or Water Pollution" and a form automatically opens. Once the form is filled out, the request is sent to the Storm/Sewer Supervisor. The Storm/Sewer Supervisor then completes a customer service request and assigns the request to the appropriate staff person.

S5.C.5.d.iii: In 2023 Surface Water staff plan to conduct training for municipal field staff, which as part of their normal job responsibilities might come into contact with or otherwise observe an illicit discharge and/or illicit connection to the MS4. Follow-up training and updates to the training will be provided as needed to address changes in procedures, techniques, requirements, or staffing. A record of the content of the training and the staff members trained will be kept for each training event.

S5.C.5.e: Public Works will implement an ongoing program designed to address illicit discharges, including spills and illicit connections, into the City's MS4.

S5.C.5.e.i: The City has a written procedure for characterizing the nature of and potential public or environmental threat posed by an illicit discharge. The procedures follow the guidance in *Illicit Connection and Illicit Discharge Filed Screening and Source Tracing Guidance Manual 2020.*

S5.C.5.e.ii: The City has a written procedure for tracing the source of an illicit discharge. The procedures follow the guidance in *Illicit Connection and Illicit Discharge Filed Screening and Source Tracing Guidance Manual* prepared for Washington State Department of Ecology by Herrera Environmental Consultants in May 2013. The procedures include visual inspections, opening manholes, using mobile cameras, and collecting and analyzing water samples.

S5.C.3.d.iii: The City has written procedures for eliminating illicit discharges. The procedures follow the guidance in *Illicit Connection and Illicit Discharge Filed Screening and Source Tracing Guidance Manual 2020.* Measures include notifying appropriate authorities and the property owner, providing technical assistance for eliminating the discharge, follow-up inspections, escalating enforcement and legal actions if the discharge is not eliminated. If an illicit connection is found the enforcement actions specified in MMC will be used to eliminate the illicit connection within 6 months.

S5.C.5.e.iv: The City follows the established procedures to respond, investigate, refer and resolve illicit discharges. All illicit discharges, including spills, which may constitute a threat to human health, welfare, or the environment, are investigated immediately. All other investigations, or referring of investigations,

will occur within 7 days of receiving a complaint, report or monitoring information indicating an illicit discharge. All field investigations will occur within 21 days of any report or discovery of a suspected illicit connection to determine the source of the connection, the nature and volume of discharge through the connection, and the party responsible for the connection. Upon confirmation of an illicit connection, the compliance strategy will be used in a documented effort to eliminate the illicit connection within 6 months.

S5.C.5.f: All staff responsible for identification, investigation, termination, cleanup and reporting illicit discharges, including spills, and illicit connections have received trainings based on the *Illicit Connection and Illicit Discharge Filed Screening and Source Tracing Guidance Manual 2020*. The response staff include the Surface Water division, Sewer/Storm Maintenance Division, or the Streets division. IDDE training will continue to be implemented by the Surface Water staff members. Trainings developed by others will also be attended, as available, including training opportunities sponsored by the Department of Ecology, HAZWOPER refresher classes, ECOSS and the Washington State Stormwater Conference. Trainings attended by any Public Works staff member are tracked by the Public Works Administrative Secretary in a custom database.

S5.C.5.g: The web based asset management software called “AKTIVOV” is used to track customer calls, inspections and follow up work orders associated with the illicit discharge program. Surface Water staff track and maintain records for the majority of activities conducted to meet the requirements of this section. Some of the records are created in AKTIVOV by other divisions during the initial reporting or clean-up activities. The data is exported from AKTIVOV and formatted in excel for the annual report. The final submittal of IDDE data follows the instructions, timelines, and format described in Appendix 12 of the Permit.

6) Controlling Runoff from New Development, Redevelopment and Construction Sites

Summary Permit Requirements

- Implement an ordinance or other enforceable mechanism that addresses runoff from new development, redevelopment, and construction site projects.
- Implement a program that includes a permitting process with site plan review, inspection and enforcement capability.
- Make available the Notice of Intent for Department of Ecology permits.
- Train staff members that are responsible for are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement.

Planned Activities

S5.C.6.a: The Surface Water Division, Engineering and Community Development Department will implement the stormwater design requirements found in the *2019 Stormwater Management Manual for Western Washington* (Stormwater Manual). The 2019 edition was adopted with Ordinance 3218, and became effective on July 1, 2022. The Stormwater Manual vesting timeframes are now included in Marysville Municipal Code (MMC) 14.15.015 Stormwater management manual adopted.

S5.C.6.b: The Surface Water Division, Engineering and Community Development Department will continue to implement a permitting process that includes the requirements, limitations and criteria found in the Stormwater Manual. Marysville Municipal Code (MMC) Title 14 requires the use of the thresholds and definitions in Appendix 1 and provides the legal authority to inspect and enforce maintenance standards for private stormwater facilities.

S5.C.6.c: All development plans received are first reviewed by Planning for general requirements. Then plans are sent to Development Services to be reviewed for technical requirements, specified in Appendix 1 and the Stormwater Manual. Concurrent with each of these review cycles the Surface Water Division is routed the plans for additional review and comment. Information regarding development plans is entered into a database called TRAKiT.

The inspection program is implemented for both private and public projects, and is completed by the Surface Water Inspector and Construction Inspectors. The Surface Water Inspector meets with the Development Services Manager and Construction Inspectors on a weekly basis to discuss ongoing construction projects. The Surface Water Inspector conducts inspections based on Appendix 7, Determining Construction Site Sediment Damage Potential. The City has chosen to inspect all construction sites based on the criteria in Appendix 7. The Surface Water Inspector also inspects active construction projects weekly and plats with active home building sites every six months. The Surface Water and Construction Inspectors verify sediment controls are installed and functioning properly throughout the construction project. Inspectors enforce as necessary based on the inspection. Enforcement actions include escalating procedures including informal verbal communication onsite during work activities, formal letters and stop work orders. These procedures are implemented per MMC Title 4 and Title 22. Construction and Building Inspectors, within Community Development,

complete project checklists when a development is completed. They verify proper installation of permanent stormwater facilities. The Inspectors also record their inspection information and enforcement actions in TRAKiT.

S5.C.6.d: Links to the Notice of Intent for Construction Activity and Notice of Intent (NOI) for Industrial Activity are available on the City web site.

S5.C.6.e: All staff whose primary job duties are implementing the program to control stormwater runoff from new development, redevelopment, and construction sites, including permitting, plan review, construction site inspections, and enforcement, are trained to conduct these activities. Follow-up training will be provided as needed to address changes in procedures, techniques or staffing. The expiration dates of the CESCL certifications are tracked by the Public Works Administrative Assistant. Participants are notified when their certification is expiring and follow-up courses are scheduled accordingly.

7) Municipal Operations and Maintenance

Summary Permit Requirements

- Implement maintenance standards that are as protective, or more protective, of facility function than those specified in the *Stormwater Management Manual for Western Washington*.
- Annual inspection of all stormwater facilities regulated by the City and keep records associated with the program.
- Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities, and taking appropriate maintenance actions in accordance with the adopted maintenance standards.
- Spot checks of potentially damaged permanent stormwater treatment and flow control BMPs/facilities after major storm events.
- Complete inspections of all catch basins and inlets owned or operated by the City.
- Implement practices, policies and procedures to reduce stormwater impacts associated with road maintenance activities and runoff from all lands owned or maintained by the City.
- Train staff members who have construction, operations or maintenance job functions that may impact stormwater quality.
- Implement a Stormwater Pollution Prevention Plan (SWPPP) for all heavy equipment maintenance or storage yards, and material storage facilities owned or operated by the City.

Planned Activities

S5.C.7.a: The City will implement the maintenance standards in the *2019 Stormwater Management Manual for Western Washington* (Stormwater Manual). If the Stormwater Manual does not have a maintenance standard that applies to a stormwater facility, then the City will use the manual developed by the manufacturer of the facility. In all cases, the applicant shall provide the proposed maintenance program to the City for approval before construction of the facility occurs.

Unless there are circumstances beyond the City's control, when an inspection identifies maintenance requirements then the maintenance is performed:

- Within 1 year for typical maintenance of facilities, except catch basins.
- Within 6 months for catch basins.
- Within 2 years for maintenance that requires capital construction of less than
- $25,000.

S5.C.7.b: The Surface Water Division and Community Development Department require measures to ensure adequate long-term operation and maintenance (O&M) of stormwater treatment and flow control BMPs/facilities. Residential projects record the long term maintenance obligations in the form of a plat document. A Stormwater Covenant and Easement has been developed to be recorded against the title of newly developed or redeveloped parcels with private stormwater facilities in commercial developments. The Stormwater Covenant and Easement was created to supplement the requirements in MMC, Title 14.

The City uses the maintenance standards in the Stormwater Manual when conducting annual inspections of publicly or privately owned stormwater treatment and flow control BMPs/facilities.

Inspection records are stored in TRAKiT during the construction phases and in an asset management software called AKTIVOV, after construction is completed. When inspections identify an exceedance of the maintenance standard a work order is created and assigned to the Surface Water Inspector. The Surface Water Inspector is responsible for coordinating with the private facility owner to complete the maintenance within the appropriate timeframes. Records for inspection, maintenance and enforcement actions are maintained.

S5.C.7.c.i: Annual inspection of all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities are completed by the Sewer/Storm Maintenance Division or Surface Water staff and maintenance needs are recorded. The inspections are tracked using a laptop in the field, in the cloud based AKTIVOV software.

When an inspection identifies an exceedance of the maintenance standard, maintenance shall be performed per the timeframes in the Permit section S5.C.7.a. For small maintenance tasks, the staff member completing the inspection will correct the problem at the time of inspection and make note of that correction in the inspection log. For larger maintenance needs, a work order will be created and assigned to the responsible staff member(s).

S5.C.7.c.ii: A route with facilities throughout the City has been created for spot checks. The facilities are representative of the storm system and serve to characterize the conditions of other facilities around them. The City maintains five rain gauges, located at Public Works, Highway 9 water treatment facility, Kellogg Regional Pond, 108th Intersection and the City regional pond. These locations spread the gauges across the whole City. If the storm event is a 24-hour 10-year recurrence interval or larger an alarm notification is sent to the Storm/Sewer Supervisor. Surface Water staff conduct inspections of the facility route and complete inspection forms in AKTIVOV. If damage is found, all stormwater facilities that may be affected will be inspected. Repairs will be conducted based on the results of inspections.

S5.C.7.c.iii: The Permit requires all municipally owned and operated catch basins to be inspected every two years. However Permittees can alter the catch basin inspection frequency as appropriate based on maintenance records of double the length of time of the new proposed inspection frequency.

In August 2017, ten years of inspection data was analyzed. Based on the results of that analysis, the City adopted a four-year cycle inspection cycle. The grids were modified and divided into 8 smaller grids. This allows Surface Water Staff and the Sewer/Storm Maintenance Division smaller areas to track and provides a specific schedule to complete each grid. The City had always completed a “High Traffic” inspection/cleaning route each spring, when sand had been applied to streets the previous winter. Based on the data analysis the high traffic routes have been expanded. This will ensure that areas with consistently higher sediment accumulation are inspected and cleaned more frequently than other areas. The high traffic routes are treated as an additional route to be cleaned in the spring when sand was applied in the winter.

The City completed the four year cycle in July 2021. Grid 4 will be completed between January and July 31st then grid 5 will be completed from August to December 31, 2023.

The decant water from cleaning catch basins is disposed of in accordance with Appendix 6 Street Waste Disposal and the provisions of the Health Department Solid Waste Facility Operations Plan. The City operates a decant facility at the Public Works shop area. Decant water from this location drains to the sanitary sewer. The remaining solid materials are managed onsite then reused or disposed of via landfill.

These procedures have been developed in accordance with the Health Department Permit (Permit #SW449).

S5.C.7.c.iv: The inspection and maintenance program is designed to inspect all sites and to achieve at least a 95% inspection rate. A method for recording each maintenance activity described above has been established.

S5.C.7.d: The policies and practices to reduce stormwater impacts associated with runoff from all lands owned or maintained by the City are consistent with the Stormwater Manual. The City has produced a reference book called the BMP Document to organize the BMP's that apply to each activity and the crew completing that activity. The City will continue to implement these policies and practices.

Table 5: S5.C.7.d Required activities to be addressed by City practices, policies and procedures

Activity	Practice/Policy/Procedure
Pipe cleaning	BMP Document 2022
Cleaning of culverts that convey stormwater in ditch systems	BMP Document 2022
Ditch maintenance	BMP Document 2022
Street cleaning	See description below. A map of the cleaning grids can be found at the end of this section, Figure 4.
Road repair and resurfacing, including pavement grinding	BMP Document 2022
Snow and ice control	BMP Document 2022
Utility installation	BMP Document 2022
Pavement striping maintenance	BMP Document 2022
Maintaining roadside areas, including vegetation management	BMP Document 2022
Dust control	BMP Document 2022
Application of fertilizers, pesticides, and herbicides	Products are applied according to the instructions for their use, including reducing nutrients and pesticides using alternatives that minimize environmental impacts. Staff using these products are properly certified.
Sediment and erosion control	BMP Document 2016
Landscape maintenance and vegetation disposal	BMP Document 2022
Trash and pet waste management	BMP Document 2022
Building exterior cleaning and maintenance	BMP Document 2022

In 2019 the City was awarded a Department of Ecology Water Quality Grant to implement an enhanced street sweeping program. The goal of this program is to improve water quality in the Allen/Quilceda Creek watershed, Ebey slough and Possession Sound. Sediment on streets and roads contains a variety of pollutants, including oil, grease, fuel, antifreeze, brake and transmission fluids, brake pad dust, plastics, fertilizer, pesticides, and fecal coliform bacteria from pet and animal waste.

With the grant funding the City was able to expand sweeping operations by adding a third sweeper. This has allowed the City to increase the frequency of service through the creation and execution of additional sweeping routes. The City estimates that the increase in sweeping will remove an additional 33-55% more sediment than the program was previously and reduce the volume of material entering surface waters by an estimated 763 cubic yards per year. The grant will expire in 2023 but the City will continue the enhanced street sweeping program.

S5.C.7.e: Surface Water staff developed an on-going training program for employees whose construction, operations or maintenance job functions may impact stormwater quality. Various training methods are used. Surface Water Staff usually present information to the field crews about BMPs annually. All Public Works crews have been given the City BMP manual, updated in 2022 as a guide in the field. Surface Water staff also check for other training opportunities for external training.

The City maintains an internal web site. Applicable training materials are posted on a Surface Water page. This ensures that all employees have access to the materials, even if they were not present on the training day. Follow up training is provided as needed to address changes in procedures, techniques or requirements.

S5.C.7.f: Surface Water staff has developed a Storm Water Pollution Prevention Plan (SWPPP) for all City owned heavy equipment, maintenance and storage yards and materials storage facilities. This document was created collaboratively between many departments in the City. The City completed construction of a new Civic Campus at the end of 2022. Staff and equipment are moving to new locations as a result. Once all the moves have taken place the SWPPP will be updated.

The Department managers or supervisors are responsible for the implementation of BMPs applicable to their work groups. The SWPPP includes detailed descriptions of the operational and structural BMPs at each City facility. Annual inspections of the facilities, and observation of discharges from the facilities, are conducted to evaluate the effectiveness of the BMPs. The SWPPP includes an inventory of the materials and equipment stored on site, and any activities that could result in stormwater pollution if BMPs are not in place. The SWPPP has a site map showing the stormwater system, outlets and areas of potential pollutant exposure. Each site map shows the location of spill kits and the corresponding text has a plan for preventing and responding to spills.

S5.C.7.g: The City will maintain records of inspections and maintenance activities conducted as a requirement of the permit. Public Works uses an online asset management software called AKTIVOV to track many of the requirements from this section.

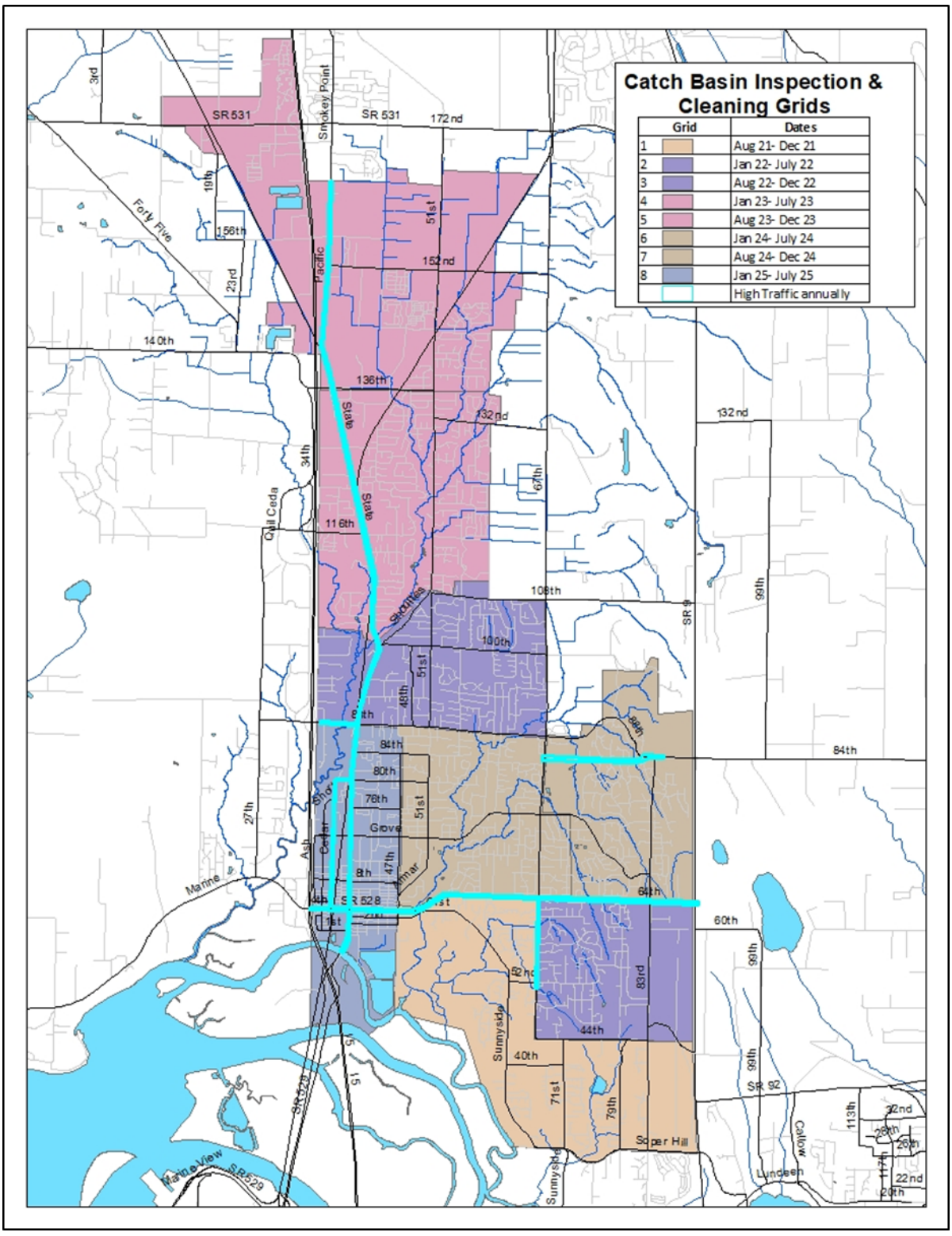


Figure 3: Catch Basin Cleaning Grids

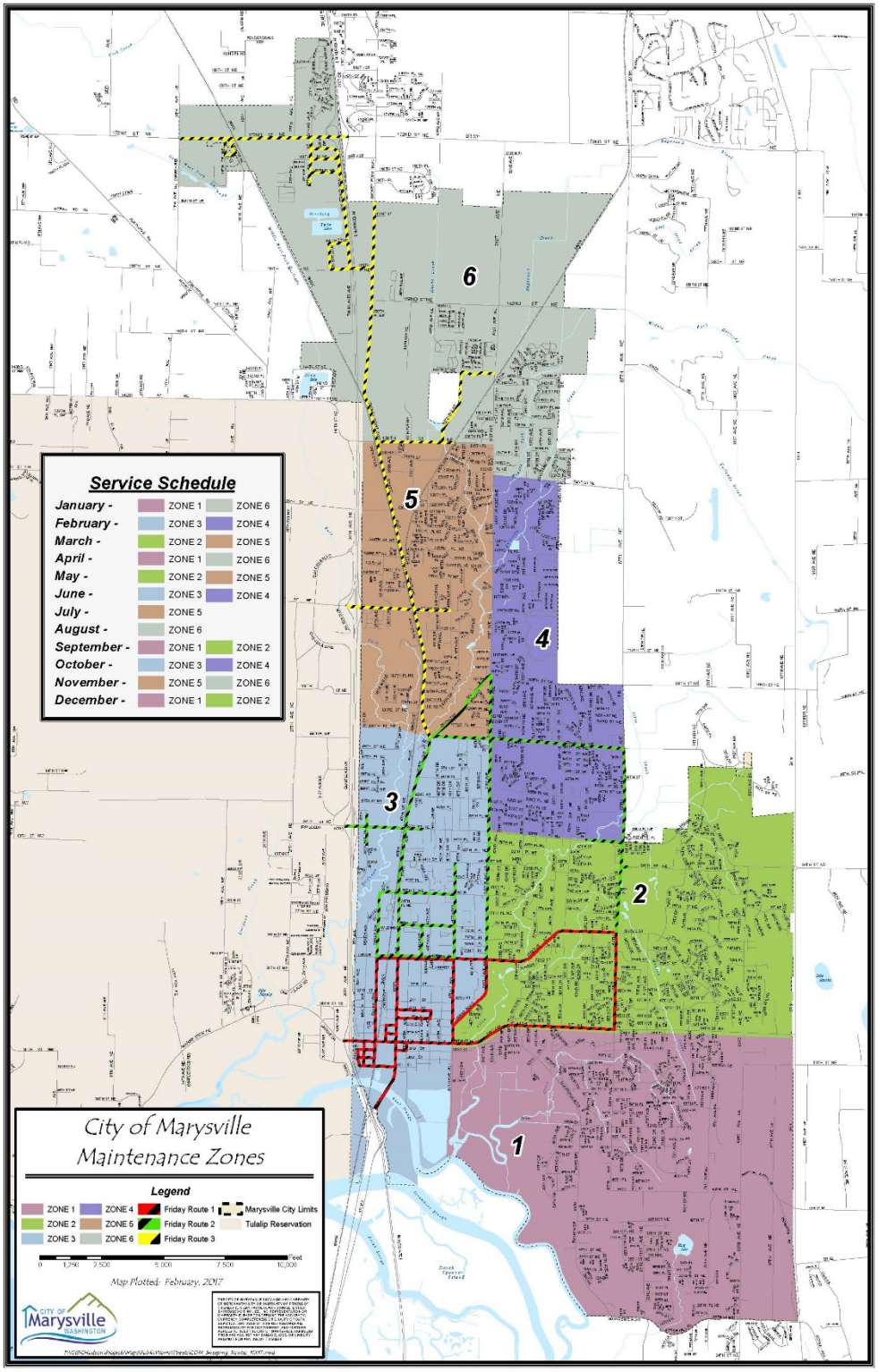


Figure 4: Street Sweeping Grids

8) Source Control Program for Existing Development

Summary Permit Requirements

- Create local ordinances for the business inspection program with enforcement capabilities.
- Develop an inventory of businesses with potential to create stormwater pollution.
- Conduct inspections of pollutant generating sources at publicly and privately owned institutional, commercial and industrial sites to enforce implementation of required BMPs to control pollution discharging into the MS4.
- Enforce the implementation of operational source control BMPs, or structural source control BMPs, for existing businesses that are potentially pollution generating.
- Encourage the use of practices to reduce polluted runoff from the application of pesticides, herbicides, and fertilizers from the sites identified in the inventory.
- Train staff members who are responsible for implementing the source control program.

Planned Activities

S5.C.8.b.i: The City adopted ordinance 3222 requiring the application of source control BMPs for pollutant generating sources associated with existing land uses and activities. The ordinance requires the use of source control BMPs from the *Stormwater Management Manual for Western Washington* (Stormwater Manual). In cases where the Stormwater Manual lacks guidance for a specific source of pollutants, the City will work with the owner/operator to implement or adapt BMPs based on the best professional judgement.

S5.C.8.b.ii: In 2022 the City established a business inventory identifying publicly and privately owned institutional, commercial, and industrial sites which have the potential to generate pollutants to the MS4. The inventory includes businesses and/or sites identified based on the presence of activities that are pollutant generating. Additional businesses and/or sites will be added to the inventory based on complaint response.

Early in 2023 staff will work to field verify sites on the list. The list is expected to be refined and revised as necessary to represent the presence of activities that are pollutant generating. A GIS based map will be created and posted on the City's web site showing the sites identified for inspection.

S5.C.8.b.iii: No later than January 1, 2023, the City will implement an inspection program for sites identified. The City created a new position, a second Surface Water Inspector, to carry out the inspections. The City was awarded a water quality assistance grant from the Department of Ecology to partially fund the first 2.5 years of salary for this new position. It is anticipated that the position will become a permanent full time position after the grant expiration.

Early in 2023 the city will create outreach materials for all sites with a business address. The information will describe activities that may generate pollutants and source control requirements. The City plans to distribute this information will be provided by mail.

Annually the City will conduct the number of inspections equal to 20% of the sites listed in the source control inventory. Follow up inspections and denial of entry will be included in the inspection count. All sites identified through complaints will be inspected.

S5.C.8.b.iv: The City adopted ordinance 3222 establishing a progressive enforcement policy that requires sites to comply with stormwater requirements within a reasonable time period as specified in the Permit. The City will use education and technical assistance to help businesses reach compliance with source control measures. If these measures fail then enforcement actions will be taken. Records of inspections reports and letters will be maintained in the City's asset management software called AKTIVOV.

S5.C.8.b.v: The City will train staff who are responsible for implementing the source control. External trainings are expected to be necessary. The City will document and maintain records of the training provided and the staff trained using the database maintained by the Public Works Administrative Services group.

TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

Summary Permit Requirements

- Inspect commercial animal handling areas and commercial composting facilities to ensure implementation of source control BMPs for bacteria and implement an ongoing inspection program to re-inspect facilities with bacteria source control problems a minimum of every three years.
- Review fecal coliform data collected under the 2013 Permit and identify one high priority area that will be the focus of targeted source identification and elimination efforts. The targeted source identification and elimination program shall be implemented in the new priority area January 1, 2021. The City shall prepare written documentation of this review and the identified high priority area; documentation will be submitted with the Annual Report for 2020.
- Continue the surface water monitoring program established under the 2013 Permit. Sampling at one or more locations as appropriate for continued characterization and long-term trends evaluation of fecal coliform.

Planned Activities

Business Inspections: Inspections at commercial animal handling areas and composting facilities within the City were completed in 2020. None of the facilities had bacteria source control problems. Inspections may occur under the Source Control program in 2023.

Targeted Source Identification & Elimination: In 2020 Surface Water staff conducted a review of the fecal coliform data collected per the approved QAPP under the 2013 Permit. From this review, the King Creek tributary was selected as the new high priority area to be the focus of targeted source identification and elimination efforts during this permit cycle. In 2023, the City will investigate potential sewer-to-storm cross-connections in new residential developments.

In each annual report, the Surface Water staff will provide a TMDL summary including qualitative and quantitative information about the targeted source identification and elimination activities, procedures followed and sampling results.

Surface Water Monitoring: Surface Water staff will continue monitoring under the approved QAPP and record the data via the Environmental Information Management (EIM) database in 2023. The QAPP has been revised to reflect updated information, such as the lab being used. In 2023 the City will seek to have the new QAPP approved by the Department of Ecology.

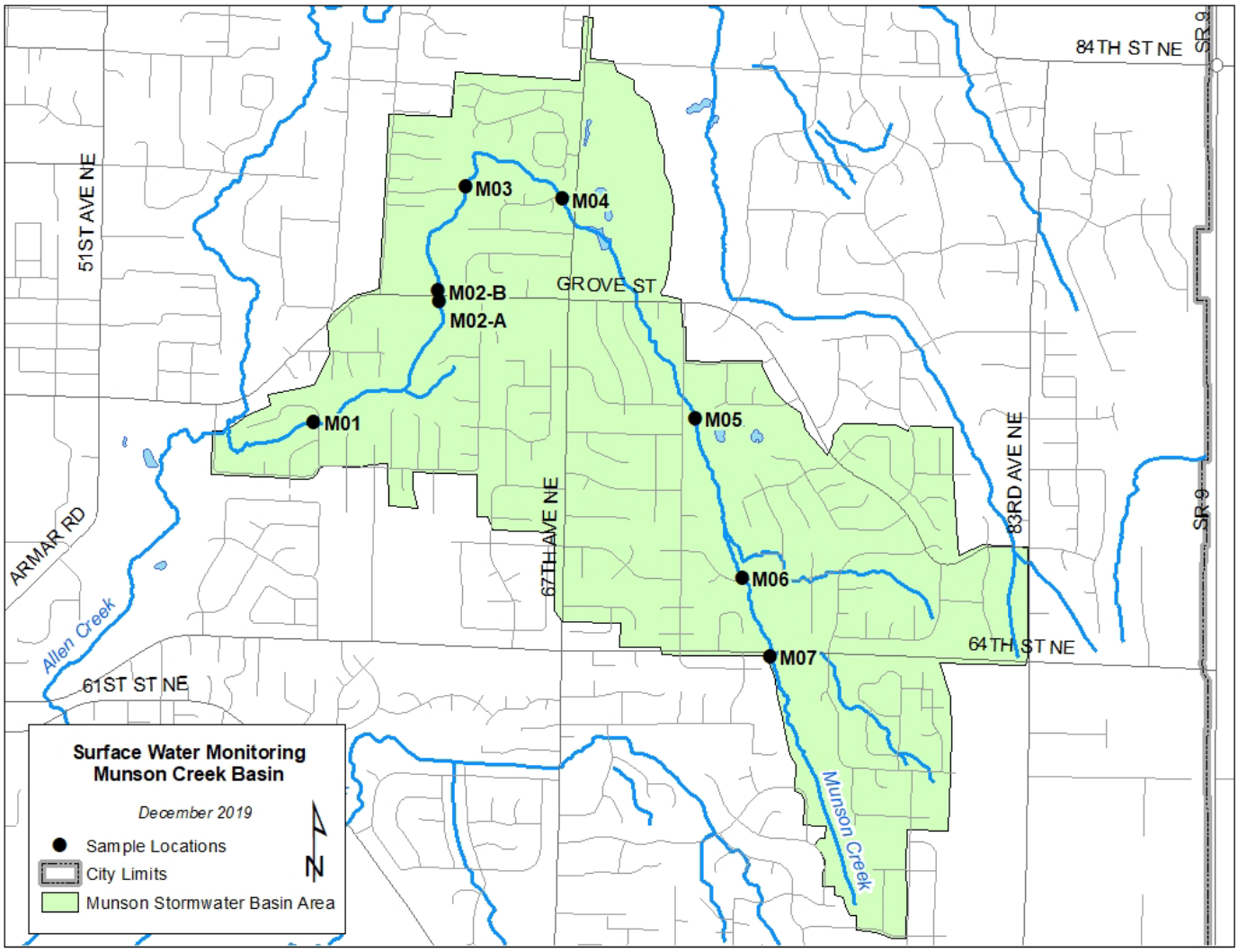


Figure 5: TMDL Sampling Locations, Munson Creek Basin

MONITORING AND ASSESSMENT

Summary Permit Requirements

- Permittees are required to conduct monitoring in the following categories: Regional Status and Trends Monitoring, Stormwater Management Program Effectiveness and Source Identification Studies.

- Permittees can pay into a collective fund that is managed by the Department of Ecology or conduct the monitoring individually.

Planned Activities

S8.A: The City has chosen Regional Status and Trends Monitoring Option "a" to meet this requirement. Option "a" requires the City pay annually into a collective fund for small stream and marine nearshore status and trends monitoring in the Puget Sound area.

S8.B: The City has chosen Effectiveness Studies and Source Identification Studies Option "a" to meet this requirement. The City will pay annually into a collective fund to implement these studies.

The City will provide information when requested for the Effectiveness and Source Identification Studies. The scope of the requests is limited to records of SWMP activities and associated data tracked and/or maintained in accordance with the Permit. There is a maximum of three requests during the permit term. The City will respond within 90 days to provide the requested information.

REPORTING REQUIREMENTS

Summary Permit Requirements

- Submit an annual report documenting the status of the programs that were implemented for the calendar year.
- Keep records related to program implementation for at least five years.
- Make all records available to the public.

Planned Activities

To ensure information is tracked throughout the year the Surface Water staff members complete memos to document actions that are not easily tracked in a database. Memos are also created when database information is checked throughout the year to ensure all requirements can be met in the scheduled timeframe. Table 5 is a summary of the different memos. When the annual report is compiled the information in these memos supplements the information that can be pulled from the AKTIVOV, TRAKiT or other databases. Some of these memos become the attachments that are required for certain program elements.

Table 6: Summary of Memo's or Attachments needed for the Annual Report

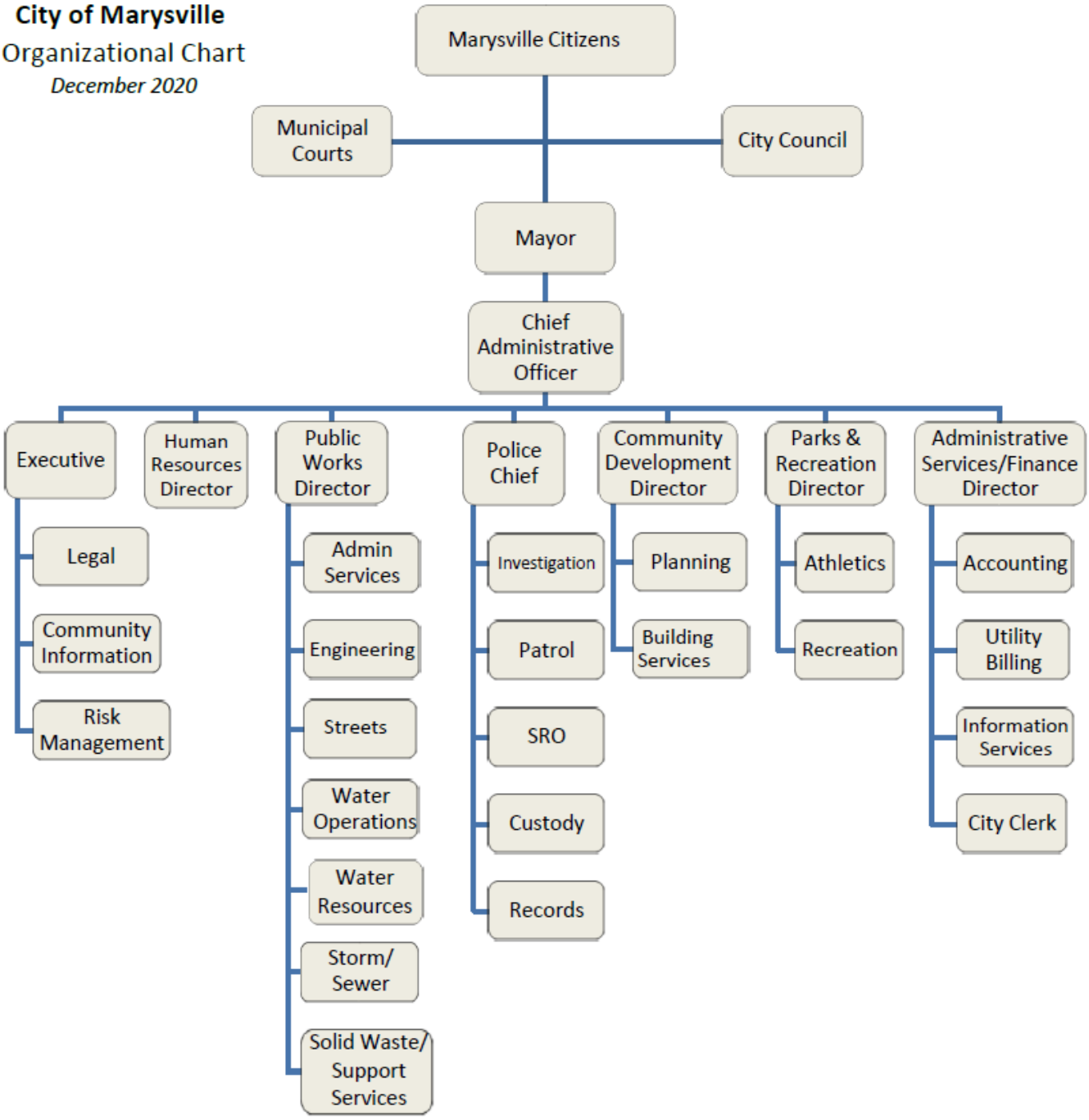
	Annual Report Question	Comment	Due Date
16	Continue to design and implement local development-related codes, rules, standards, or other enforceable documents to minimize impervious surfaces, native vegetation loss, and stormwater runoff, where feasible? See S5.C.1.c.i. (Required annually)	Low Impact Development review report. Review ordinances that have been adopted for the year. Determine if any EDDS changes occurred during the year. Coordinate with Community Development to answer questions about their ordinances. Write up a description of the review.	January 31st
21	Attach description of public education and outreach efforts conducted per S5.C.2.a.i and ii.	Start with the description of program in the SWMP and add actual dates, and program details as they occur. Includes facility inspections that are above and beyond requirements, earth day, etc.	Ongoing Report Due: January 31st
39, 41, 55, 70, 79	Implemented training programs for IDDE, Controlling Runoff, O&M, Source Control Program	Keep the sign in sheets and a copy of power point presentations to be compiled into one training report at the end of the year. All trainings should also be reported to the Public Works Administrative Secretary for tracking.	Ongoing Report Due: January 31st
61	Annually inspected stormwater treatment and flow control BMPs/facilities per S5.C.7.b.i(b).	Private facility inspection memo.	Report Due: December 1st
59	Performed timely maintenance per S5.C.7.a.ii.	Review and report the facility inspections. Add information about filter vault inspection and cleaning. Track down the status of all facility "revisits".	Review inspection data in October Report Due: December 1st
63	Annually inspected all municipally owned or operated permanent stormwater treatment and flow control BMPs/facilities. (S5.C.7.c.i)		
66	Inspected all municipally owned or operated catch basins and inlets as per S5.C.7.c.iii, or used an alternative approach. (and performed timely maintenance)	Review and report the CB inspections. Ensure a work order has been created when "revisit" was selected or comments indicate work is required.	Review inspection data Quarterly Report Due: December 1st
81	Complied with the Total Maximum Daily Load (TMDL)-specific requirements identified in Appendix 2. (S7.A)	Start with the description of program in the SWMP and add actual dates, and program details. Use sampling data to create graphs.	Ongoing Report Due: January 31st

APPENDIX 1- City Organizational Charts

City of Marysville

Organizational Chart

December 2020



Community Development
December 2022

PUBLIC WORKS

ORGANIZATIONAL CHART
October 2022

Rev. 10/24/22

- Public Works Director — Jeff Laycock
  - Assistant Public Works Director/City Engineer — Max Phan
    - Assistant City Engineer — Ken McIntyre
      - Engineering Coordinator — Vacant
      - Senior Project Manager — Steve Miller
      - Senior Project Manager — Pat Gruenhagen
      - Project Engineer — Nick Greene
      - Project Engineer — Nick Loutsis
      - Project Engineer — Thadd Zehnder
      - Project Engineer — Vacant
      - Engineering Technician — Dave Rasar
      - Engineering Technician — Jason Cantu
      - Development Services Manager — Vacant
        - Civil Plan Reviewer — Shane Whitney
        - Civil Plan Reviewer — Kacey Simon
        - Construction Inspector II — Rick Herzog
        - Construction Inspector II — Corey Watson
        - Construction Inspector I — Jon Wessel
        - Development Services Tech — Brad Zahnow
    - Transportation and Parks Maintenance Manager — Jesse Birchman
      - Streets Supervisor — Jake Wetzel
        - Streets Maint. Lead II — Kaleb Callahan
        - Streets Maint. Tech II — Jonathan Bartlett
        - Streets Maint. Tech II — Robb Smith
        - Streets Maint. Tech II — Jason Osborn
        - Streets Maint. Tech II — Travis Pike
        - Streets Maint. Tech II — Vacant
        - Streets Maint. Tech II — Jake Munro
        - Streets Maint. Tech II — Derek Hudon
        - Traffic Control Systems Tech — Vacant
        - Traffic Maint. Worker II — Heather Kinney
        - Streets Maint. Lead I — Vacant
        - Streets Maint. Tech II — Eddie Brown
        - Streets Maint. Tech II — Travis Pike
        - Streets Maint. Tech I — Monty Mechling
        - Streets Maint. Tech I — Vacant
        - Streets Maint. Tech I — Beltran Sandre
        - Streets Maint. Tech I — Trevor Remle
      - Traffic Engineering Manager — Jesse Hannahs
        - Associate Traffic Engineer — Danny Hagen
        - Sr. Traffic Control System Tech — Eric Matthews
        - Sr. Traffic Control System Tech — James Deaver
      - Parks Maintenance Supervisor — Jeramie Roth
        - Parks Maint. Lead II — Desi Szechenyi
        - Parks Maint. Tech II — Eric Chrisman
        - Parks Maint. Tech II — Eddie Phelps
        - Parks Maint. Tech II — Vacant
        - Parks Maint. Tech I — Devin Akau
        - Parks Maint. Tech I — Nathan Markham
        - Parks Maint. Tech I — Joe Morgan
    - Public Works Services Manager — Skip Knutsen
      - Fleet and Facilities Supervisor — Mark Cardon
        - Lead Custodian — Toni Majerus
        - Custodian — Bruce Soule
        - Custodian — Robert McCleve
        - Custodian — Vacant
        - Facilities Maint. Journeyman — Marty Norsby
        - Mechanic Lead II — Bob Scott
        - Mechanic — Steve Hackford
        - Mechanic — Daniel Garvin
        - Mechanic — Matthew Erickson
        - Mechanic — Kris Wentz
        - Small Equipment Mechanic — Randy Thorson
        - Purchasing/ Inventory Specialist — Kevin Bond
      - Solid Waste Supervisor — Kristy Beedle
        - Solid Waste Lead II — Darrin Douglas
        - Solid Waste Tech II — Michael Rairdon
        - Solid Waste Tech II — Jason Rose
        - Solid Waste Tech II — Allen Scott
        - Solid Waste Tech II — Jason Potts
        - Solid Waste Tech II — Ed Tinsley
        - Solid Waste Tech II — Elijah MacDicken
        - Solid Waste Tech II — Kevin Phipps
        - Solid Waste Tech II — Sam Day
        - Solid Waste Tech II — Jeremy Havellana
        - Solid Waste Tech II — Ross Johnston
      - Administrative Services Supervisor — Shelli Edwards
        - PW Administrative Specialist — Laurie Barbosa
        - PW Administrative Assistant — Vacant
    - Utility Manager — Adam Benton
      - Water Operations Supervisor — Kim Bryant
        - Construction Lead II — Tim King
        - Construction Lead I — Jason Strope
        - Construction Tech II — Chris Cary
        - Construction Tech II — Travis Giebel
        - Construction Tech II — Josh Guenzler
        - Construction Tech II — Corey Miller
        - Construction Tech II — Ben Gunn
        - Water Quality Lead — Billy Gilbert
        - Water Quality Specialist — Krista Gessner
        - Water Quality Specialist — Justin Palitz
        - Water Quality Specialist — Vacant
        - Water Operations Lead II — Ryan Keefe
        - Water Operations Tech II — Vacant
        - Water Operations Tech II — Vacant
        - Water Operations Tech II — Carl Wineland
        - Water Operations Tech II — Michael Petek
        - Water Operations Tech II — Kevin Gessner
        - Water Operations Tech II — Mark Mallahan
        - Water Operations Tech II — Brent Potter
        - Utility Locator — Vacant
        - Cross Connection Control Specialist — Vacant
        - Standby
      - Water Resources Supervisor — Jason Crain
        - WWTP Maint. Lead — Robert Slenker
        - WW Maintenance Tech II — Steve Bryant
        - WW Maintenance Tech I — Frank Stair
        - WW Maintenance Tech I — John Buell
        - WWTP Operations Lead — Jeff Cobb
        - Industrial Waste/ Pre-Treatment Tech — Shane Freeman
        - WWTP Operator — Robert Primm
        - WWTP Operator — Johnathan Castro
        - WWTP Operator — Darin Eay
        - Meter Technician — Ron Bryant
        - Meter Technician — TJ Dietz
        - Meter Technician — Bryce Martinson
        - SCADA/Telemetry Administrator — Roy Alderman
        - Utility Electrician — Arthur Peaslee
      - Storm/Sewer Supervisor — Matthew Eyer
        - NPDES Coordinator — Brooke Ensor
        - Surface Water Inspector — Ryan Carney
        - Surface Water Specialist — Karina Unruh
        - Storm/Sewer Tech Lead II — Austin Akau
        - Storm/Sewer Lead I — Jared Billieu
        - Storm/Sewer Tech II — Gabe Lance
        - Storm/Sewer Tech II — Jacob Reiswig
        - Storm/Sewer Tech II — Vacant
        - Storm/Sewer Tech I — Matthew Jessen
        - Storm/Sewer Tech I — Kevin Ward
        - Storm/Sewer Tech I — Chris Reilly
        - Storm/Sewer Tech II — Jason Lindberg

APPENDIX 2- 2023 Schedule